

3/11/05 Phone call to K. Shimura
2nd P. (EMS) Al Larson

SFUND RECORDS CTR
2349220

EBIS list - (AZ)

Phelps - Dodge Morenci

Temp Hwy. 666

Better address?

Wants to know more exact address -
to see if this applies to his client.

I said someone from T-4 would find
out & call him back.

Al Larson

EMS

303-484-6162

Please respond.

Paul - If we don't have better location
for PD Morenci, ask Larry
Bowerman in air.

Paula

Larry Bowerman X 7638

~~XXXXXXXXXX~~

AZD039055413

file out to
Jeff Ry

Phelps Dodge Morenci
ON Temporary Hwy 666
Morenci, AZ 85540

PO Box 187

"Middle Chase Creek"

Mine is "Morenci Pit"
Smelter: in Morenci enormous. Clifton Quad. Clifton AZ
MINES: ~ N of Morenci ON Hwy 666

Metcalf Mine 2-4 mi E of Hwy 666
within 4 miles of Morenci

Try

- Dave Chelgren State EMS
(602) 257-2277

- ~~Water Division~~ ~~Hartman Agnew~~ Office Reg
X 8042 Council

- Water Division Greg Arthur X 8323

Steve Johnson / Alexis Strauss is working on this
"Litigation Report"
will describe it.

To : Paul
From : Pam

3/12/85

RE : Address for ERRIS site
Phelps Dodge Morenci Branch

I spoke to Larry Bowerman of Air who referred me to Greg Arthur (x 8323) of the Water Division. Greg was very helpful. This site is very huge! The following addresses are correct:

NOTE

(ON ERRIS)

1. on Temporary Hwy 666
Morenci, AZ 85540

2. Middle Chase Creek
Morenci, AZ 85540

(Creek is major identifying mark at this site)

3. Morenci Pit
Morenci, AZ 85540

Morenci Pit is common name (landmark)

4. ^{U.S.G.S.} Clifton Quadrangle
Clifton AZ

Site takes up the whole quad practically.

Greg explained that the site is so large that a typical address just isn't possible. I did get a mailing address as well. It is : PO Box 187 Morenci AZ 85560.

Greg also mentioned he has worked with Steve Johnson + Alexis Shanas on a litigation report. Steve + Alexis may know more.

I'm adding the locations into Erris.

Pam

FACILITY ID NUMBER

COMPANY NAME

A	2	D	0	3	9	0	5	5	4	1	3
---	---	---	---	---	---	---	---	---	---	---	---

Phelps Dodge Corp. Morenci Branch

COMPANY ADDRESS

on temporary Hwy: 666.

CITY

Morenci.

STATE ARMY.

A2

ZIP CODE

CONTACT PERSON'S NAME/TITLE

TELEPHONE NUMBER INCLUDE AREA

602 865-3006

CONTACT RECORD

(602) 865-4521

[illegible]

A2D039 055 413

o the

NT CORP.

THE PRIMARY COPPER INDUSTRY
OF ARIZONA

IN
1981

Special Report Number 5

BY

NYAL J. NIEMUTH

November 1982

ARIZONA DEPARTMENT OF MINERAL RESOURCES

JOHN H. JETT, DIRECTOR

PHOENIX OFFICE

MINERAL RESOURCE BUILDING
FAIRGROUNDS
PHOENIX, ARIZONA 85007
(602) 255-3791

TUCSON OFFICE

STATE OFFICE BUILDING
ROOM 161, 416 W. CONGRESS
TUCSON, ARIZONA 85701
(602) 628-5399

PHELPS DODGE CORPORATION

Phelps Dodge has five operating units in Arizona. (1) The Morenci Branch includes the Metcalf and Morenci open pit mines and concentrators, a dump leaching operation and precipitation plant, the Morenci smelter and acid plant. (2) The New Cornelia Branch includes an open pit mine, a concentrator, a smelter and acid plant. (3) The Copper Queen Branch at Bisbee consists of leaching activities at the Lavender Pit, underground mines and dumps, and a precipitation plant. (4) The Douglas Reduction Works operates a smelter with a rated capacity of 700,000 tons per year of input material. (5) The Safford Branch is developing an underground mine ten miles north of Safford.

Phelps Dodge again led the state in the production of copper. In 1981 the company produced 467.7 million pounds of recoverable copper, approximately 20% of Arizona's total production. More than 80% of that production was from the company's and the state's largest mine, Morenci.

Although 1981 mine production increased over strike affected 1980's, it was not up to 1979 levels. This was due to reduced operating rates implemented in response to low copper demand and prices which provided no incentive to maximize production. Specifically, the mining rate at Morenci was reduced 8% in March by adopting a six day work week. Also, the regular summer shut-down and Christmas holiday period were extended. At the start of 1982, production schedules were reduced by 20% thru the use of a four day work week to further curtail output.

At the Morenci mill, two additional banks of 1,000-cubic foot flotation cells were installed as part of the continuing modernization program. Use of the new cells has resulted in improved copper recoveries. The Morenci mine continued to supply both the Morenci and Metcalf concentrators. This supplied a slightly higher grade to the concentrators and for a limited period of time will lower the overall waste to ore ratio. At Metcalf, mill equipment has been installed to permit the grinding circuit to be put under full computer control.

In April a 1,850 acre tract of land adjoining the Metcalf and Morenci mines, known as the Western Copper Property, was purchased from Hanna Mining Company for \$10 million. Ownership of this property will permit greater flexibility and efficiency in mining operations at Morenci and Metcalf. Acquisition of the property, which had been under lease, will allow saving in the disposal of waste from the Morenci mine. Estimated reserves for the property are 350 million tons of mixed copper oxides and sulfides with an average grade of 1.0%.

A program to bring the Morenci smelter into compliance with the Clean Air Act by January 1, 1985 began in 1981. The program resulted from a consent decree negotiated with the Environmental Protection Agency. Under the terms of that decree, Phelps Dodge will install facilities at Morenci to produce oxygen, modify two reverberatory furnaces and their associated feeding systems, install new gas collection systems, and upgrade the existing acid plant. Total cost for the project is expected to be \$185 million. Full scale testing of a smelting technique using oxygen in the reverberatory furnace confirmed that it can achieve satisfactory smelting rates and produce waste gases sufficiently rich in sulfur dioxide to be treated in the sulfuric acid plant. Construction of a 500 ton per day oxygen plant began in May. Expenditures on the program thru the end of 1981 totaled \$17.4 million.

-continued-

Phelps Dodge Continued

At New Cornelia pre-production stripping for pit expansion continued. The locomotive shop and mine engineering building were relocated to accommodate the expansion of the mine. Also completed was the construction of a new mine garage and combination mine office and change room. At the New Cornelia Concentrator, testing of flotation cells larger than those being installed at Morenci indicated that similar improvements in copper recovery may be achieved there.

The consent decree with the Environmental Protection Agency also applies to the smelter at New Cornelia where compliance with the Clean Air Act is required by December 31, 1985. No expenditures are required there until 1985. An evaluation is being made whether closure is economically preferable to spending the approximately \$45 million required for the construction modification program.

Development expenditures for the year were \$8 million at the Dos Pobres underground project near Safford. Progress was made in driving a drift to connect the number one and number two shafts, which are 10,000 feet apart. Two mine levels were expanded from the number one shaft. A total of \$81.8 million has been invested there so far.

Progress was made during 1981 in processing applications to exchange land needed for the Copper Basin Property near Prescott.

Production from leaching at the Copper Queen Branch was 4.6 million pounds. Phelps Dodge's new small mines division produced some gold-silver ore during 1981 from the closed Bisbee underground copper mines.

The Douglas smelter currently operates under a nonferrous smelter order which provides a variance from sulfur dioxide emission limitation requirements of the Clean Air Act. In addition the smelter does not currently comply with particulate emission limitations. However, a new interim limitation has been proposed to apply during the period of the nonferrous smelter order, and which, if adopted, should be achieved by Douglas with presently installed equipment. Unless the law or economic conditions change, the costs of additional facilities needed to comply with emission regulations will force the smelter to close by December 31, 1987 or sooner.

RANCHERS EXPLORATION AND DEVELOPMENT COMPANY

Production continued at normal levels from the Bluebird mine in 1981, with the solvent extraction plant producing over 13 million pounds of cathode copper. However, mining operations were adversely affected by the declining price for copper and the increasing overburden to ore ratio. The stripping of overburden from the deposit ceased early in the year. In July, mining activities were terminated and construction of ore leaching heaps halted. Leaching of existing heaps continued for the rest of the year.

-continued-

MORENCI BRANCH

Morenci 85540 - Phone 865-4521 - Employees 3,26 - Two open pit copper mines - two concentrators (molybdenum circuit included at Morenci) -

PHELPS DODGE CORPORATION (Continued)

MORENCI BRANCH (Continued)

Tailings leach plant and precipitation plant - Smelter capacity 900,000 TPY - acid plant 852,000 TPY.

Manager.....	J. L. Bolles
Gen. Supt., Operations & Production.....	J. L. Madson
Gen. Supt., Administration & Technology.....	H. E. Dunham
Superintendent of Mines.....	L. D. Olson
Superintendent of Concentrators.....	A. J. Broderick
Smelter Superintendent.....	R. E. Johnson
Mech. & Elec. Superintendent.....	J. L. Armstrong
Director of Engineering & Geological Services....	E. M. Schern
Director of Technical Services & Research.....	W. J. Chen
Materials Management Supervisor.....	G. A. Gray
Supply Supervisor.....	R. F. Ayers
Master Mechanic.....	S. C. Cocks
Director of Personnel Services.....	R. P. Boland
Asst. Chief Geologist.....	F. J. Menzer

ARIZONA DEPARTMENT OF MINERAL RESOURCES
Mineral Building, Fairgrounds
Phoenix, Arizona

1. Information from: R. Moolich & J. O'Neill
Address: Morenci
2. Mine: Morenci 3. No. of Claims - Patented _____
Unpatented _____
4. Location: Morenci
5. Sec several Tp _____ Range _____ 6. Mining District Morenci
7. Owner: Phelps Dodge Corp
8. Address: Douglas Arizona
9. Operating Co.: Same
10. Address: _____
11. President: _____ 12. Gen. Mgr. J. O'Neill
13. Principal Metals: Copper, Silver Gold Moly No. Employed: Approx 2000
15. Mill, Type & Capacity: Flotation 60 - 70M tpd. Leach Plant. Smelter
16. Present Operations: (a) Down ☐ (b) Assessment work ☐ (c) Exploration ☐
(d) Production ☒ (e) Rate 70M Equiv. tpd.
17. New Work Planned: New stack for the smelter so that capacity can be doubled.
A 4½ mile areal tram from the Evans point lime quarry.
18. Misc. Notes: ▲

Date: 2-5-69

[Signature]
(Signature)

(Field Engineer)

ARIZONA DEPARTMENT OF MINERAL RESOURCES
Mineral Building, Fairgrounds
Phoenix, Arizona

1. Information from: Mr. O'Neill & Durek
Address: Morenci, Arizona 85540
2. Mine: Morenci 3. No. of Claims - Patented _____
Unpatented _____
4. Location: Morenci, Arizona
5. Sec _____ Tp _____ Range _____ 6. Mining District: Copper King Mt.
Copper Mt. & Metcalf.
7. Owner: Phelps-Dodge Corp.
8. Address: Morenci Arizona
9. Operating Co.: Phelps-Dodge Corp.
10. Address: Morenci Arizona
11. President: _____ 12. Gen. Mgr.: Walter Lawson
13. Principal Metals: Copper 14. No. Employed: 2010
15. Mill, Type & Capacity: Flotation, 70,000 TPD
16. Present Operations: (a) Down ☐ (b) Assessment work ☐ (c) Exploration ☐
(d) Production ☒ (e) Rate 70,000 tpd.
17. New Work Planned: The pit is being expanded and will take in the old
Morenci townsite .
18. Misc. Notes: Expansion of the smelter will be done so as to accommodate
custom material and concentrates from the New Mexico operations at Tyrone.
A new limestone quarry is being opened at North Mob. A tram will probably
be constructed from the Evans point quarry.

Date: 12-4-68

H.W. Durek
(Signature)

(Field Engineer)

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Phelps-Dodge, Morenci

Date June 7, 1967

District Copper Mountain

Engineer G. W. Irvin

Subject: Mine vsist. Information from J. Durek.

The Mine The pit is rapidly being advanced to the south west. The site of the old engineering, geological offices, main mine shaft, and the upper townsite are either being removed or covered with waste.

A new road to the old pit visitors view point has been built, so that an excellent view of the operations can be obtained.

The dump along Chase Creek is advancing toward the highway. The collection system for the copper leaching plant can be observed. At the junction of the Case Creek, Morenci highway, the final ~~collection vat~~ collection vat, pumping system and pipes leading to the mill can be seen.

Mining rate is reported at between 60,000 & 70,000 tpd.

ARIZONA DEPARTMENT OF MINERAL RESOURCES
Mineral Building, Fairgrounds
Phoenix, Arizona

1. Information from: Chief Geologist & Personal visit
Address: _____
2. Mine: Phelps Dodge 3. No. of Claims - Patented _____
MORENCI BRANCH Unpatented _____
4. Location: _____
5. Sec _____ Tp _____ Range _____ 6. Mining District Morenci
7. Owner: P.D. Corp
8. Address: Morenci
9. Operating Co.: P.D. Corp
10. Address: Morenci
11. President: _____ 12. Gen. Mgr.: J. O'Neill
13. Principal Metals: Copper 14. No. Employed: _____
15. Mill, Type & Capacity: _____
16. Present Operations: (a) Down ☐ (b) Assessment work ☐ (c) Exploration ☐
(d) Production ☒ (e) Rate _____ tpd.
17. New Work Planned: Pit Expansion & New Metall
Mine
18. Misc. Notes: ~~Work~~ Construction of Train towers to
Evans point Lime Quarry proceeding on Schedule
New Smelter stack nearing completion will
have inside lined with Firebrick after concrete work
finished. will take smoke from converter & other
operations around smelter

Date:

6-4-69

(Signature)

Glen J. Ivers

(Field Engineer)

8/12/85 *Revised 2/20/85*
Confidential

RECORD OF COMMUNICATION		<input checked="" type="checkbox"/> PHONE CALL <input type="checkbox"/> DISCUSSION <input type="checkbox"/> FIELD TRIP <input type="checkbox"/> CONFERENCE	
		<input type="checkbox"/> OTHER (SPECIFY)	
		(Record of item checked above)	
TO: Val Danos AZ Water Quality Board (602) 255-1262	FROM: Cheryl Weln T-4-2	DATE	2-24-84
		TIME	10:00 AM
SUBJECT Phelps Dodge Corp. Morenci Branch (AZD039055413)			
SUMMARY OF COMMUNICATION Mr. Danos informed me that Phelps, Morenci is not currently under a Board NPDES permit. He added that this does not mean that it shouldn't be.			
CONCLUSIONS, ACTION TAKEN OR REQUIRED Check EPA NPDES permits			
INFORMATION COPIES TO: <i>file</i>			